

## Town of Carlisle Office of BOARD OF HEALTH 66 Westford Street Carlisle, MA 01741

Brem\_083\_10.21.2014

Tel.: (978) 369-0283 Fax: (978) 369-4521

**TOWN CLERK-CARLISLE** 

CHARLENE M. HINTON

## **MEMORANDUM**

To:

Zoning Board of Appeals

From: Date:

Board of Health October 20, 2014

In Re:

100 Long Ridge Road 40B Application - Scope of Work Recommendations

The Carlisle Board of Health is very concerned about the potential groundwater impacts from proposed wells and leaching areas for the above development which is located in a nitrogen sensitive area. To assist both the Zoning Board and the Board of Health in evaluating these impacts, the Board of Health would like to recommend that the following items be included as requirements in the hydrogeological assessment:

## Wastewater discharge:

- 1. Groundwater Mounding Analysis
- 2. Nitrogen/nitrate contour plume plotted on a map
- 3. Mass Balance nitrogen loading model
- 4. Contour map showing groundwater flow directions and hydraulic gradients across the site
- 5. Potential impacts for all sensitive receptors (private wells) within 500' of the proposed leaching areas, including all receptors proposed by the applicant.
- 6. A well monitoring plan and construction details based on the nitrogen/nitrate plume map

### Water Supply

- 1. Review proposed well testing protocols
- 2. Develop testing protocols to determine hydraulic connectivity for all wells within 500' of the property and within the facility site and the potential for water quality and water supply impacts
- 3. Consideration of water filtration systems and backwash discharge disposal
- 4. Consideration of irrigation and landscaping for the development
- 5. Consideration of the potential for high levels of arsenic in the wells based on DEP Map for "Probability of Exceeding the Arsenic and/or the Uranium Drinking Water Standards in Private Drinking Water Wells in Massachusetts"

The Board has received a copy of the memo from GeoHydrocycle, Inc. dated 10/19/14 and agrees with the recommendations.

The Board continues to be concerned with the proposed private well configuration in lieu of a Public Water Supply. DEP has not yet made a determination.



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If you have any questions, please contact the Board.

BOH:lmf

/Lifetime Green Homes

cc: Town Clerk